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50 LOCUST AVENUE			MERCHANT, SHAHID R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Occurrence	10/697,541	BUCKWALTER ET AL.				
Office Action Summary	Examiner	Art Unit				
	SHAHID R. MERCHANT	3692				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 Ma	arch 2008					
• • • • • • • • • • • • • • • • • • • •	•					
3) Since this application is in condition for allowan		secution as to the merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-40</u> is/are pending in the application.						
• • • • • • • • • • • • • • • • • • • •	4a) Of the above claim(s) <u>2-6,10-12,15-19,28-34,37,38 and 40</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
	6)⊠ Claim(s) <u>1, 7-9, 13-14, 20-27, 35 and 39</u> is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) acce	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some coll None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) ☐ Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P	atent Application				
Paper No(s)/Mail Date 6) Other:						

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### **DETAILED ACTION**

### Status of the Claims

- 1. This action is in response to the amendment filed on March 28, 2008.
  - Claims 1-40 are pending.
  - Claims 2-6, 10-12, 15-19, 28-34, 36-38 and 40 have been withdrawn.
  - Claims 1, 7-9, 13-14, 20-27, 35 and 39 are examined.

# Response to Arguments

2. Applicant's arguments filed March 28, 2008 have been fully considered but they are not persuasive. Applicant claims that the prior art does not teach identifying tradethrough transactions using market option data in real time nor prior to the customer's order being fully executed, deleted or canceled. Examiner disagrees. Paragraphs 9-15 as shown below show market option data in real time.

[0009] Another embodiment of the present invention is a system and method for real-time options trading over a global computer network, such as the Internet. In particular, the present invention discloses a system for <u>real-time</u> trading of options contracts between a plurality of traders over a computer network. The system includes a computer network, a market server, and two or more trader clients.

[0010] The market server is connected to the computer network. The market server additionally processes and executes matched trade orders in <u>substantially real time</u>. The market server may also preclude execution of a trade based on credit available to the human trader.

[0011] The two or more trader clients are connected to the computer network so each of the trader clients can be placed into communication with the market server. Each of the trader clients facilitates enters and transmits commands in substantially real-time to the market server and displays substantially real-time updates from the market server. Each of the trader clients further provides information to the human trader regarding a desired underlying commodity market as received from the market server. Each trader client may then display the underlying commodity information in a working order and filled order windows. The underlying commodity information is alternatively available to the human trader in both summary and detailed form.

[0012] The trader client's commands may include trade orders wherein the market server distributes the trade orders and any executions of same to each of the trader clients in <u>substantially real-time</u>. Each trader client facilitates the entry of commands by providing a graphical user interface. The trader client may also facilitate the entry of the commands by providing a simplified order entry language.

[0013] A further embodiment of the present invention discloses a method for real-time trading of options contracts between multiple traders on an underlying commodity over a computer network using a client-server system having multiple clients. The method includes submitting commands to the server, acting upon the commands submitted from multiple clients at the server, and displaying all information from the server regarding the submitted commands. Traders enter the commands that are submitted to the server. The commands entered are issued from multiple clients in regard to the underlying commodity. Providing multiple command entry methods may facilitate the submission of the commands. One such entry method involves using graphical user interface

principles. Another such entry method involves a quick entry language.

[0014] Acting upon the commands submitted includes matching trade order commands of at least two traders according to a set of rules in <u>substantially real-time</u>. Acting upon the commands further includes validating commands prior to acting further on the command.

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[0015] Information from the server regarding submitted commands related to the underlying commodity and resulting server actions is displayed in <u>substantially real-time</u> on all of the multiple clients. The display further includes parsing the information into multiple windows depending upon the status of the order.

Regarding, Rule 11Ac1-7, Rule 11Ac1-7 teaches the concept of identifying trade-through transactions. Although Rule 11Ac1-7 does not require a transaction to be identified before completion, one of ordinary skill in the art could have easily modified the teachings of Rule 11Ac1-7 with predictable results. It would be an obvious design choice with predictable results. Instead of identifying a trade-through transaction after execution, it would be identified prior to execution.

- 3. Regarding claim 7, Applicant argues that Nordlicht does not teach tabulating trade-at or trade-through data or comparing such tabulated data with tabulated fulfillment data. Examiner disagrees. Rule 11Ac1-7 teaches the concept of identifying trade-through transactions. Displaying the trade-through transactions in a tabulated format and comparing it is old and well known in the art. Paragraphs 82, 83 and 139 recite the various data and information that can be displayed regarding transactions. In fact, Figure 7 shows tabulated data. Therefore, when combined with Rule 11Ac1-7, one can easily display the tabulated data for comparing purposes.
- 4. Next, regarding claim 14, Applicant argues that Nordlicht does not teach the limitation of "disregarding." Examiner disagrees. Paragraph 86 describes a situation where a user may "kill" an order which is being displayed if it does not meet the user's requirements. This would be analogous to disregarding.

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5. Regarding claim 20, Applicant makes the same argument as presented for claim

7. See response to argument above in paragraph 3. As mentioned above, comparing tabulated data is old and well known in the art. One can view Figure 7A and make comparisons between prices and Expiration Dates very easily. Also, Nordlicht mentions in several places the act of comparing data (see paragraphs 58, 86 and 137) as shown below.

[0058] In one embodiment, each Firm F in market server 101 has a Counterparty List (CL) that consists of other Firms F1, F2, . . . Fn that firm F may accept as potential counterparties to a trade. Thus, each market bid in the bid queues is associated with the submitting trader 50 and the submitting trader's Firm. Then, the <u>market server may compare both the best bid/best ask and the Firm for any one offer</u>. Even if the Right Price Queuing Rule indicates that two orders should trade, each party must also be in the other's Counterparty List. So, if the best bid firm does not have the best ask firm in its counterparty list or the best ask firm does not have the best bid firm in its counterparty Rule."

[0086] When a quote, order or market summary line is selected, the trader may double-click on that entry prompting trader client 200 to display an order entry card (FIG. 4) window automatically populated by trader client 200 with values calculated to optimally execute against the selected quote or order. The order entry window also provides means for the trade to hit the bid, lift the offer, change a bid price or quantity, change an ask price or quantity and/or save the order to the "potential order" window 238. Once one of the actions above is selected, the trader is then presented with a detailed display of the order to be submitted, which is <u>reviewed</u> and modified as desired and then the trader specifies the submit, replace, kill, or potential order actions.

[0137] Trader client 200 may also provide an API for a user to send the details of a potential order prior to submission to a third party analytics package. The third party package can calculate a bid and ask price then can be inserted into the order details. The user may then <u>review</u> the results, and submit the order.

# Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 7-9, 13-14, 20-27, 35 and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Nordlicht et al., U.S. Patent Application Publication 2002/0194115 (see PTO-892, Ref. A) in view of <u>Securities Exchange Act of 1934, Rules 11Ac1-5 and 11Ac1-7</u> (see PTO-892, Refs. U and V). Hereinafter Exchange Act.

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8. As per claim 1, Nordlicht teaches a method comprising:

identifying an option limit order, said option limit order including information identifying a customer, information identifying a desired option, and information that indicates a limit price for said option limit order (see paragraphs 48 and 85);

receiving a substantially real time feed of option market data (see paragraphs 9-15).

Nordlicht does not explicitly teach using the option market data in real time to identify a trade-through transaction relevant to said option limit order, said identifying occurring at a time prior to said option limit order being fully executed, deleted or canceled.

Exchange Act teaches using the option market data in real time to identify a trade-through transaction relevant to said option limit order, said identifying occurring at a time prior to said option limit order being fully executed, deleted or canceled (see Ref. U, page 22 and Ref. V, pages 8, 9, 10, 14, 27, 28, 31, 33 and 35). Rules 11Ac1-5 and 11Ac1-7 of the Securities Exchange Act of 1934 focus on various information that must be provided to a customer regarding their orders. Rule 11Ac1-5 requires market centers to make available to the public monthly electronic reports that include statistical measures of execution quality. Rule 11Ac1-7 requires a broker to disclose to its customer when an order placed by the customer is executed at an inferior price to a better published price on another market at that same instant.

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Therefore, it would be prima facie obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Nordlicht and Exchange Act to identify a trade-through transaction relevant to an option order because it is a required disclosure by the U.S. Securities and Exchange Commission (see Ref. U and V).

- 9. As per claim 7, Nordlicht and Exchange Act teach the method of claim 1 as described above. Nordlicht further teaches comprising: using the identified at least one of a trade-through transaction and a trade-at transaction to tabulate at least one of trade-through data and trade-at data for a plurality of option limit orders placed by the customer; tabulating fulfillment data for the plurality of option limit orders placed by the customer; and comparing the tabulated fulfillment data to the tabulated at least one of trade-through data and trade-at data (see paragraphs 82-83, 139 and Figure 7A).
- 10. As per claim 8, see paragraph 3 above of this Office Action.
- 11. As per claim 9, Nordlicht and Exchange Act teach the method of claim 1 as described above. Nordlicht further teaches wherein the identifying the option limit order includes receiving the option limit order (see paragraph 85).
- 12. As per claim 13, Nordlicht and Exchange Act teach the method of claim 1 as described above. Nordlicht further teaches wherein said information identifying a desired option further includes: a type of said order, a security underlyer, an option expiration date, and a size of said order (see paragraphs 3 and 85).
- 13. As per claim 14, Nordlicht and Exchange Act teach the method of claim 1 as described above. Nordlicht further teaches comprising: disregarding the identified at

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least one of a trade-through transaction and a trade-at transaction in response to a market condition in effect at a time of the transaction (see paragraph 86).

14. As per claim 20, Nordlicht teaches a method comprising:

receiving a plurality of option limit orders, each of said option limit orders including information identifying a respective desired option, and information that indicates a respective limit price for said option limit order (see paragraph 85);

tabulating data for the plurality of option limit orders (see paragraphs 82-83, 139 and Figure 7A);

tabulating fulfillment data for the plurality of option limit orders (see paragraphs 82-83, 139 and Figure 7A); and

comparing the tabulated fulfillment data to the tabulated data (see paragraphs 82-83, 139 and Figure 7A).

Nordlicht does not explicitly teach about tabulating trade-through data.

Exchange Act teaches identifying a trade-through transaction.

Therefore, it would be prima facie obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Nordlicht and Exchange Act teaches to tabulate trade-through data because it would allow one to identify when a customer is not getting the best price as taught by Exchange Act.

Official Notice is taken that tabulating data in rows and columns for the purpose of displaying data and information to a user in an easy to read format is old and well known in the arts.

15. As per claim 21, see paragraph 3 above of this Office Action.

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16. As per claim 22, Nordlicht and Exchange Act teach the method of claim 20 as described above. Nordlicht further teaches wherein the tabulating at least one of tradethrough data and trade-at data includes purging cancelled transactions (see paragraph 139).

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- 17. As per claim 23, Nordlicht and Exchange Act teach the method of claim 20 as described above. Nordlicht further teaches wherein the at least one of trade-through data and trade-at data corresponds only to transactions occurring on a leading exchange (see paragraph 3). Data gathered under Rule 11Ac1-7 would provide information regarding transactions occurring on a leading exchange.
- 18. As per claim 24, Nordlicht and Exchange Act teach the method of claim 20 as described above. Nordlicht further teaches wherein the tabulating at least one of tradethrough and trade-at data includes carrying over open option limit orders from a previous trading day (see paragraphs 51-56).
- 19. As per claim 25, Nordlicht and Exchange Act teach the method of claim 20 as described above. Nordlicht further teaches wherein the tabulating at least one of tradethrough data and trade at data includes tabulating at least one of trade-through data and trade-at data that pertains to a single customer (see paragraphs 138-139).
- 20. As per claim 26, Nordlicht and Exchange Act teach the method of claim 20 as described above. Nordlicht further teaches wherein the tabulating at least one of tradethrough data and trade at data includes tabulating at least one of trade-through data and trade-at data that pertains to option limit orders routed to a single exchange (see

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paragraphs 34-49). Data gathered under Rule 11Ac1-7 would provide information regarding transactions routed to a single exchange.

- 21. As per claim 27, Nordlicht and Exchange Act teach the method of claim 20 as described above. Nordlicht further teaches wherein the tabulating at least one of trade-through data and trade-at data and the tabulating fulfillment data are performed with respect to each trading day (see paragraphs 138-139).
- 22. Claims 35 and 39 recite similar limitations to claim 20 and thus rejected using the same art and rationale in the rejection of claim 20 as set forth above (see also paragraphs 29-33).

### Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHID R. MERCHANT whose telephone number is (571)270-1360. The examiner can normally be reached on First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz P. Abdi can be reached on 571-272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SRM

/Kambiz Abdi/ Supervisory Patent Examiner, Art Unit 3692